#15

SEQUENCE LISTING

<110> Hofmann, Marion Elke
      Domdey, Horst
      Henkel, Thomas

<120> Myocardium-and-Skeletal Muscle-Specific
    Nucleic Acid, Its Preparation and Use

<130> 50125/008001

<140> US 09/445,362
<141> 2000-05-15

<150> PCT/EP98/03584
<151> 1998-06-15

<150> DE 19725186.2
<151> 1997-06-13

<160> 7

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 1936
<212> DNA
<213> Homo sapiens

<400> 1
cagcctgcca cttgcctccc tgcctgcttc tggctgcctt gaatgcctgg tccttcaagc 60
tccttctggg tctgacaaag cagggaccat gtctaccttt ggctaccgaa gaggactcag 120
taaatacgaa tccatcgacg aggatgaact cctcgcctcc ctgtcagccg aggagctgaa 180
ggagctagag agagagttgg aagacattga acctgaccgc aaccttcccg tggggctaag 240
gcaaaagagc ctgacagaga aaacccccac agggacattc agcagagagg cactgatggc 300
ctattgggaa aaggagtccc aaaaactctt ggagaaggag aggctggggg aatgtggaaa 360
ggttgcagaa gacaaagagg aaagtgaaga agagcttatc tttactgaaa gtaacagtga 420
ggtttctgag gaagtgtata cagaggagga ggaggaggag tcccaggagg aagaggagga 480
agaagacagt gacgaagagg aaagaacaat tgaaactgca aaagggatta atggaactgt 540
aaattatgat agtgtcaatt ctgacaactc taagccaaag atatttaaaa gtcaaataga 600
gaacataaat ttgaccaatg gcagcaatgg gaggaacaca gagtccccag ctgccattca 660
cccttgtgga aatcctacag tgattgagga cgctttggac aagattaaaa gcaatgaccc 720
tgacaccaca gaagtcaatt tgaacaacat tgagaacatc acaacacaga cccttacccg 780
ctttgctgaa gccctcaagg acaacactgt ggtgaagacg ttcagtctgg ccaacacgca 840
tgccgacgac agtgcagcca tggccattgc agagatgctc aaagccaatg agcacatcac 900
caacgtaaac gtcgagtcca acttcataac gggaaagggg atcctggcca tcatgagagc 960
tctccagcac aacacggtgc tcacggagct gcgtttccat aaccagaggc acatcatggg 1020
cagccaggtg gaaatggaga ttgtcaagct gctgaaggag aacacgacgc tgctgaggct 1080
gggataccat tttgaactcc caggaccaag aatgagcatg acgagcattt tgacaagaaa 1140
tatggataaa cagaggcaaa aacgtttgca ggagcaaaaa cagcaggagg gatacgatgg 1200
aggacccaat cttaggacca aagtctggca aagaggaaca cctagctctt caccttatgt 1260
atctcccagg cactcaccct ggtcatcccc aaaactcccc aaaaaagtcc agactgtgag 1320
gagccgtcct ctgtctcctg tggccacact tcctcctcct ccccctcctc ctcctcctcc 1380
ccctccttct tcccaaaggc tgccaccacc tcctcctcct cccccctcctc cactcccaga 1440
gaaaaagctc attaccagaa acattgcaga agtcatcaaa caacaggaga gtgcccaacg 1500
ggcattacaa aatggacaaa aaagaaaaa agggaaaaag gtcaagaaac agccaaacag 1560
tattctaaag gaaataaaaa attctctgag gtcagtgcaa gagaagaaaa tggaagacag 1620

-1-

```
ttcccgacct tctaccccac agagatcagc tcatgagaat ctcatggaag caattcgggg 1680
aagcagcata aaacagctaa agcgggtgga agttccagaa gccctgcgat gggaacatga 1740
tctttagaag aggatgcaga actgttcagt ggtattacat gaaatgcatt gtgagatgtt 1800
tctaaaatac cttcttcaat tcaaaatgat ccctgacttt aaaaataatc tcacccatta 1860
attccaaaga gaatcttaag aaacaatcag catgtttctt ctgtaaatat gaaaataaat 1920
ttctttttta tgtcgt                                                1936
```

<210> 2
<211> 2080
<212> DNA
<213> Homo sapiens

<400> 2
```
cagcctgcca cttgcctccc tgcctgcttc tggctgcctt gaatgcctgg tccttcaagc 60
tccttctggg tctgacaaag cagggaccat gtctaccttt ggctaccgaa gaggactcag 120
taaatacgaa tccatcgacg aggatgaact cctcgcctcc ctgtcagccg aggagctgaa 180
ggagctagag agagagttgg aagacattga acctgaccgc aaccttcccg tggggctaag 240
gcaaaagagc ctgacagaga aaacccccac agggacattc agcagagagg cactgatggc 300
ctattgggaa aaggagtccc aaaaactctt ggagaaggag aggctggggg aatgtggaaa 360
ggttgcagaa gacaaagagg aaagtgaaga agagcttatc tttactgaaa gtaacagtga 420
ggtttctgag gaagtgtata cagaggagga ggaggaggag tcccaggagg aagaggagga 480
agaagacagt gacgaagagg aaagaacaat tgaaactgca aaagggatta atggaactgt 540
aaattatgat agtgtcaatt ctgacaactc taagccaaag atatttaaaa gtcaaataga 600
gaacataaat ttgaccaatg gcagcaatgg gaggaacaca gagtccccag ctgccattca 660
cccttgtgga aatcctacag tgattgagga cgctttggac aagattaaaa gcaatgaccc 720
tgacaccaca gaagtcaatt tgaacaacat tgagaacatc acaacacaga cccttacccg 780
ctttgctgaa gccctcaagg acaacactgt ggtgaagacg ttcagtctgg ccaacacgca 840
tgccgacgac agtgcagcca tggccattgc agagatgctc aaagccaatg agcacatcac 900
caacgtaaac gtcgagtcca acttcataac gggaaagggg atcctggcca tcatgagagc 960
tctccagcac aacacggtgc tcacggagct gcgtttccat aaccagaggc acatcatggg 1020
cagccaggtg gaaatggaga ttgtcaagct gctgaaggag aacacgacgc tgctgaggct 1080
gggataccat tttgaactcc caggaccaag aatgagcatg acgagcattt tgacaagaaa 1140
tatggataaa cagaggcaaa aacgtttgca ggagcaaaaa cagcaggagg gatacgatgg 1200
aggacccaat cttaggacca aagtctggca aagaggaaca cctagctctt caccttatgt 1260
atctcccagg cactcaccct ggtcatcccc aaaactcccc aaaaaagtcc agactgtgag 1320
gagccgtcct ctgtctcctg tggccacact tcctcctcct ccccctcctc ctcctcctcc 1380
ccctccttct tcccaaaggc tgccaccacc tcctcctcct ccccctcctc cactcccaga 1440
gaaaaagctc attaccagaa acattgcaga agtcatcaaa caacaggaga gtgcccaacg 1500
ggcattacaa aatggacaaa aaaagaaaaa agggaaaaag gtcaagaaac agccaaacag 1560
tattctaaag gaaataaaaa attctctgag gtcagtgcaa gagaagaaaa tggaagacag 1620
ttcccgacct tctaccccac agagatcagc tcatgagaat ctcatggaag caattcgggg 1680
aagcagcata aaacagctaa agcgggtgga agttccagaa gccctgcgat gggaacatga 1740
tctttagaag aggatgcaga actgttcagt ggtattacat gaaatgcatt gtgagatgtt 1800
tctaaaatac cttcttcaat tcaaaatgat ccctgacttt aaaaataatc tcacccatta 1860
attccaaaga gaatcttaag aaacaatcag catgtttctt ctgtaaatat gaaaataaat 1920
ttctttttta tgtcgtgaga tttgtattgg caagaagcag ttaatttaaa gatgctcttc 1980
ctatctgtgg atgtgttggt aactccgagt tgtaatgagt tcatgaaatg tgctgttatt 2040
tttgtaatct caataaatgt ggattgaagt ttttttccctt              2080
```

<210> 3
<211> 2268
<212> DNA
<213> Homo sapiens

<400> 3
```
cagcctgcca cttgcctccc tgcctgcttc tggctgcctt gaatgcctgg tccttcaagc 60
tccttctggg tctgacaaag cagggaccat gtctaccttt ggctaccgaa gaggactcag 120
taaatacgaa tccatcgacg aggatgaact cctcgcctcc ctgtcagccg aggagctgaa 180
ggagctagag agagagttgg aagacattga acctgaccgc aaccttcccg tggggctaag 240
```

```
gcaaaagagc ctgacagaga aaaccccac agggacattc agcagagagg cactgatggc 300
ctattgggaa aaggagtccc aaaaactctt ggagaaggag aggctggggg aatgtggaaa 360
ggttgcagaa gacaaagagg aaagtgaaga agagcttatc tttactgaaa gtaacagtga 420
ggtttctgag gaagtgtata cagaggagga ggaggaggag tcccaggagg aagaggagga 480
agaagacagt gacgaagagg aaagaacaat tgaaactgca aaagggatta atggaactgt 540
aaattatgat agtgtcaatt ctgacaactc taagccaaag atatttaaaa gtcaaataga 600
gaacataaat ttgaccaatg gcagcaatgg gaggaacaca gagtccccag ctgccattca 660
cccttgtgga aatcctacag tgattgagga cgctttggac aagattaaaa gcaatgaccc 720
tgacaccaca gaagtcaatt tgaacaacat tgagaacatc acaacacaga cccttacccg 780
ctttgctgaa gccctcaagg acaacactgt ggtgaagacg ttcagtctgg ccaacacgca 840
tgccgacgac agtgcagcca tggccattgc agagatgctc aaagccaatg agcacatcac 900
caacgtaaac gtcgagtcca acttcataac gggaaagggg atcctggcca tcatgagagc 960
tctccagcac aacacggtgc tcacggagct gcgtttccat aaccagaggc acatcatggg 1020
cagccaggtg gaaatggaga ttgtcaagct gctgaaggag aacacgacgc tgctgaggct 1080
gggataccat tttgaactcc caggaccaag aatgagcatg acgagcattt tgacaagaaa 1140
tatggataaa cagaggcaaa aacgtttgca ggagcaaaaa cagcaggagg gatacgatgg 1200
aggacccaat cttaggacca aagtctggca aagaggaaca cctagctctt caccttatgt 1260
atctcccagg cactcaccct ggtcatcccc aaaactcccc aaaaaagtcc agactgtgag 1320
gagccgtcct ctgtctcctg tggccacact tcctcctcct cccctcctc ctcctcctcc 1380
ccctccttct tcccaaaggc tgccaccacc tcctcctcct cccctcctc cactcccaga 1440
gaaaaagctc attaccagaa acattgcaga agtcatcaaa caacaggaga gtgcccaacg 1500
ggcattacaa aatggacaaa aaaagaaaaa agggaaaaag gtcaagaaac agccaaacag 1560
tattctaaag gaaataaaaa attctctgag gtcagtgcaa gagaagaaaa tggaagacag 1620
ttcccgacct tctaccccac agagatcagc tcatgagaat ctcatggaag caattcgggg 1680
aagcagcata aaacagctaa agcgggtgga agttccagaa gccctgcgat gggaacatga 1740
tctttagaag aggatgcaga actgttcagt ggtattacat gaaatgcatt gtgagatgtt 1800
tctaaaatac cttcttcaat tcaaaatgat ccctgacttt aaaaataatc tcacccatta 1860
attccaaaga gaatcttaag aaacaatcag catgtttctt ctgtaaatat gaaaataaat 1920
ttctttttta tgtcgtgaga tttgtattgg caagaagcag ttaatttaaa gatgctcttc 1980
ctatctgtgg atgtgttggt aactccgagt tgtaatgagt tcatgaaatg tgctgttatt 2040
tttgtaatct caataaatgt ggattgaagt tttttccctt tttttaaagc caaactaata 2100
tttttctgtg acttgataca tctgtcagat ttttgtaatc tcgataaatg tgtattgaag 2160
ttttttccct tttttaaaa agccaaacta atatttttct gtgagttaat acatctgtca 2220
ggtgtgtatg taacattact ggacattaaa aaaaattatt acattctc      2268
```

<210> 4
<211> 552
<212> PRT
<213> Homo sapiens

<400> 4
```
Met Ser Thr Phe Gly Tyr Arg Arg Gly Leu Ser Lys Tyr Glu Ser Ile
1               5                   10                  15
Asp Glu Asp Glu Leu Leu Ala Ser Leu Ser Ala Glu Glu Leu Lys Glu
            20                  25                  30
Leu Glu Arg Glu Leu Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val
        35                  40                  45
Gly Leu Arg Gln Lys Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe
    50                  55                  60
Ser Arg Glu Ala Leu Met Ala Tyr Trp Glu Lys Glu Ser Gln Lys Leu
65                  70                  75                  80
Leu Glu Lys Glu Arg Leu Gly Glu Cys Gly Lys Val Ala Glu Asp Lys
                85                  90                  95
Glu Glu Ser Glu Glu Glu Leu Ile Phe Thr Glu Ser Asn Ser Glu Val
            100                 105                 110
Ser Glu Glu Val Tyr Thr Glu Glu Glu Glu Glu Ser Gln Glu Glu
        115                 120                 125
Glu Glu Glu Glu Asp Ser Asp Glu Glu Glu Arg Thr Ile Glu Thr Ala
    130                 135                 140
```

-3-

```
Lys Gly Ile Asn Gly Thr Val Asn Tyr Asp Ser Val Asn Ser Asp Asn
145                 150                 155                 160
Ser Lys Pro Lys Ile Phe Lys Ser Gln Ile Glu Asn Ile Asn Leu Thr
                165                 170                 175
Asn Gly Ser Asn Gly Arg Asn Thr Glu Ser Pro Ala Ala Ile His Pro
            180                 185                 190
Cys Gly Asn Pro Thr Val Ile Glu Asp Ala Leu Asp Lys Ile Lys Ser
            195                 200                 205
Asn Asp Pro Asp Thr Thr Glu Val Asn Leu Asn Asn Ile Glu Asn Ile
    210                 215                 220
Thr Thr Gln Thr Leu Thr Arg Phe Ala Glu Ala Leu Lys Asp Asn Thr
225                 230                 235                 240
Val Val Lys Thr Phe Ser Leu Ala Asn Thr His Ala Asp Asp Ser Ala
            245                 250                 255
Ala Met Ala Ile Ala Glu Met Leu Lys Ala Asn Glu His Ile Thr Asn
            260                 265                 270
Val Asn Val Glu Ser Asn Phe Ile Thr Gly Lys Gly Ile Leu Ala Ile
            275                 280                 285
Met Arg Ala Leu Gln His Asn Thr Val Leu Thr Glu Leu Arg Phe His
    290                 295                 300
Asn Gln Arg His Ile Met Gly Ser Gln Val Glu Met Glu Ile Val Lys
305                 310                 315                 320
Leu Leu Lys Glu Asn Thr Thr Leu Leu Arg Leu Gly Tyr His Phe Glu
                325                 330                 335
Leu Pro Gly Pro Arg Met Ser Met Thr Ser Ile Leu Thr Arg Asn Met
            340                 345                 350
Asp Lys Gln Arg Gln Lys Arg Leu Gln Glu Gln Lys Gln Gln Glu Gly
            355                 360                 365
Tyr Asp Gly Gly Pro Asn Leu Arg Thr Lys Val Trp Gln Arg Gly Thr
    370                 375                 380
Pro Ser Ser Ser Pro Tyr Val Ser Pro Arg His Ser Pro Trp Ser Ser
385                 390                 395                 400
Pro Lys Leu Pro Lys Lys Val Gln Thr Val Arg Ser Arg Pro Leu Ser
            405                 410                 415
Pro Val Ala Thr Leu Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro
            420                 425                 430
Pro Ser Ser Gln Arg Leu Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro
            435                 440                 445
Leu Pro Glu Lys Lys Leu Ile Thr Arg Asn Ile Ala Glu Val Ile Lys
    450                 455                 460
Gln Gln Glu Ser Ala Gln Arg Ala Leu Gln Asn Gly Gln Lys Lys Lys
465                 470                 475                 480
Lys Gly Lys Lys Val Lys Lys Gln Pro Asn Ser Ile Leu Lys Glu Ile
            485                 490                 495
Lys Asn Ser Leu Arg Ser Val Gln Glu Lys Lys Met Glu Asp Ser Ser
            500                 505                 510
Arg Pro Ser Thr Pro Gln Arg Ser Ala His Glu Asn Leu Met Glu Ala
            515                 520                 525
Ile Arg Gly Ser Ser Ile Lys Gln Leu Lys Arg Val Glu Val Pro Glu
    530                 535                 540
Ala Leu Arg Trp Glu His Asp Leu
545                 550
```

<210> 5
<211> 10
<212> DNA
<213> Homo sapiens

<400> 5
ccttctaccc   10

<210> 6
<211> 278
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 12, 50, 222, 243, 255, 265
<223> n = A,T,C or G

<400> 6
gccaacacgc antccgacga cagtgcagcc atggtcattg cagagatgcn caaagtcaat 60
gagcacatca ccaacgtaaa cgtcgagtcc aacttcataa cgggaaaggg gatcctggcc 120
atcatgagag ctctccagca caacacggtg ctcacggagc tgcggtttca taaccagagg 180
cacatcatgg gcagccaggt ggaaatggag attgtcaagc tnctgaagga gaacacgacg 240
ctnctgaggc tgggntacca ttttnaactc ccaggacc   278

<210> 7
<211> 92
<212> PRT
<213> Homo sapiens

<400> 7
Pro Thr Arg Asn Pro Thr Thr Val Gln Pro Trp Ser Leu Gln Arg Cys
 1   5   10   15
Ile Lys Val Asn Glu His Ile Thr Asn Val Asn Val Glu Ser Asn Phe
            20   25   30
Ile Thr Gly Lys Gly Ile Leu Ala Ile Met Arg Ala Leu Gln His Asn
            35   40   45
Thr Val Leu Thr Glu Leu Arg Phe His Asn Gln Arg His Ile Met Gly
    50   55   60
Ser Gln Val Glu Met Glu Ile Val Lys Leu Leu Lys Glu Asn Thr Thr
65   70   75   80
Leu Leu Arg Leu Gly Tyr His Phe Lys Leu Pro Gly
                85   90